



## Contents

Preface for the golden edition of coordination chemistry reviews R.E.P. Winpenny .....	1
<b>Structure and Dynamics</b>	
Doubly pyridazine-bridged macrocyclic complexes of copper in +1, +2 and mixed valent oxidation states S. Brooker, T.C. Davidson, S.J. Hay, R.J. Kelly, D.K. Kennepohl, P.G. Plieger, B. Moubaraki, K.S. Murray, E. Bill and E. Bothe .....	3
Photochemistry and electronic spectroscopy of the $\text{Ru}(\text{SnPh}_3)_2(\text{CO})_2(\alpha\text{-diimine})$ complexes: an ab initio investigation of the model system $\text{Ru}(\text{SnH}_3)_2(\text{CO})_2(\text{Me-DAB})$ (DAB = 1,4-diaza-1,3-butadiene) M. Turki and C. Daniel .....	31
Tuning metalloporphyrin and metallophthalocyanine redox potentials using ligand electrochemical ( $E_1$ ) and Hammett ( $\sigma_p$ ) parametrization C. Alexiou and A.B.P. Lever .....	45
Dinuclear metal complexes and ligands: stabilities and catalytic effects A.E. Martell, J. Perutka and D. Kong .....	55
New transition metal imido chemistry with diamido-donor ligands L.H. Gade and P. Mountford .....	65
Studies on charge distribution and valence tautomerism in transition metal complexes of catecholate and semiquinonate ligands C.G. Pierpont .....	99
Control of photoinduced energy transfer between metal-polypyridyl luminophores across rigid covalent, flexible covalent, or hydrogen-bonded bridges M.D. Ward and F. Barigelli .....	127
Phosphinidene complexes of p block metals: new routes to cyclic ligands and Zintl phases A.D. Hopkins, J.A. Wood and D.S. Wright .....	155
Molecular design of luminescent dinuclear gold(I) thiolate complexes: from fundamentals to chemosensing V.W.-W. Yam, C.-L. Chan, C.-K. Li and K.M.-C. Wong .....	173

The table of contents of *Coordination Chemistry Reviews* is included in ESTOC — Elsevier Science Tables of Contents service — which can be accessed on the World Wide Web at the following URL:  
<http://www.elsevier.nl/locate/estoc> or <http://www.elsevier.com/locate/estoc>

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. Please refer to the online version of the Guide for Authors at <http://www.elsevier.com/locate/ccr>

Schiff-based bipyridine ligands. Unusual coordination features and mesomorphic behaviour R. Ziessel	195
<b>21<sup>st</sup> Century Materials</b>	
Design of organometallic molecular and ionic materials D. Braga, L. Maini, M. Polito, L. Scaccianoce, G. Cojazzi and F. Grepioni	223
Transition and post-transition metal systems incorporating linked synthetic macrocycles as structural elements J.D. Chartres, L.F. Lindoy and G.V. Meehan	249
Complexes of tetraazacycles bearing methylphosphinic/phosphonic acid pendant arms with copper(II), zinc(II) and lanthanides(III). A comparison with their acetic acid analogues I. Lukeš, J. Kotek, P. Vojtišek and P. Hermann	287
Coordination polymers: polymers, rings and oligomers containing gold(I) centres R.J. Puddephatt	313
<b>Biotechnology and Medicine</b>	
ICCC34 — golden edition of coordination chemistry reviews. Coordination chemistry for the neurosciences S.C. Burdette and S.J. Lippard	333
Similarities and differences between the isoelectronic Gd <sup>III</sup> and Eu <sup>II</sup> complexes with regard to MRI contrast agent applications É. Tóth, L. Burai and A.E. Merbach	363
Current status of <i>trans</i> -platinum compounds in cancer therapy G. Natile and M. Coluccia	383
Actinide expanded porphyrin complexes J.L. Sessler, A.E. Vivian, D. Seidel, A.K. Burrell, M. Hoehner, T.D. Mody, A. Gebauer, S.J. Weghorn and V. Lynch	411
<b>Technological Advances</b>	
Controlling the assembling/disassembling process of metal-containing superstructures V. Amendola, L. Fabbrizzi and P. Pallavicini	435
The reactions of transition metal ions with chlorine(III) I. Fábián	449
New chemistry with old ligands: <i>N</i> -alkyl- and <i>N,N</i> -dialkyl- <i>N'</i> -acyl(aryl)thioureas in coordination, analytical and process chemistry of the platinum group metals K.R. Koch	473
The development of chiral metallacrowns into anion recognition agents and porous materials J.J. Bodwin, A.D. Cutland, R.G. Malkani and V.L. Pecoraro	489
<b>Chemistry of Life</b>	
Shape- and enantioselective interaction of Ru(II)/Co(III) polypyridyl complexes with DNA L.-N. Ji, X.-H. Zou and J.-G. Liu	513
Studies on the genotoxicity of chromium: from the test tube to the cell R. Codd, C.T. Dillon, A. Levina and P.A. Lay	537
Chemical selection of elements by cells R.J.P. Williams	583
Author Index	597
Subject Index	599

